

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (Currently Amended) A network interface device, comprising:

a plurality of physical ports, including a main port, one primary port and at least one secondary port, and each said primary and said secondary port providing corresponding activity status signals and a main port having said a physical address;

a data multiplexer connected to said plurality of physical ports for selectively providing a data flow between said main port and a selected one of said primary and secondary port ports according to a control signal;

a controller management logic/timer connected to said data multiplexer for selecting which of said primary and said secondary port provides said data flow to and from said main port, said management logic/timer further including a means for receiving management control adapted to receive control signals from a host computer, said management control signals machine and including a timer for providing an output signal at an interval programmable time delay; and according to said host machine control signals,

a link activity detector coupled to said management logic/timer and connected to receive said primary and secondary port corresponding activity status signals and provide a corresponding signals to said management control,

wherein said management logic/timer control timer is further responsive to an inactive status from said corresponding the selective one of said primary and secondary port activity status signals to begin counting an inactive time interval and if said inactive time interval exceeds said a programmed programmable time delay and there is data activity on a non-selected port, interval, and said management logic/timer generates a control further includes logic means to provide said multiplexer control signal upon receipt of said timer output signal and the presence of data activity of a non-selected port, whereupon said multiplexer provides a connection between said main port and said non-selected port.

Claim 2. (Canceled)

Claim 3. (Currently Amended) The Network Interface device of claim [[2]] 1, wherein said host computer machine further includes an applet providing selected operator control of said management logic/timer.

Claim 4. (Currently Amended) The Network Interface device of claim 3, wherein said host computer machine applet includes a graphical user interface GUI providing said selected operator control.

Claim 5. (Currently Amended) The Network Interface device of claim 1, wherein said timer interval is programmable delay time is between from about 1 to 32 seconds, inclusive.

Claim 6. (Currently Amended) A software multi port network interface control system for a local computer machine having an operating system, comprising:

a configuration manager applet graphical user interface operable on said local computer to configure a multi-port network interface and establish a programmable time delay controllable by a specific said local machine; and

a multi port network interface driver program operable by said operating system responsive to a at least one network interface card coupled to said local computer having selectable multiple physical ports to selectively provide data to and receive data from a selected port of said network interface card according to a control signal; and

a programmable timer wherein said network interface card is responsive to data flow through said selected port, and switching to a non-selected port that has data activity when said data flow through said selected port is inactive for a time interval about approximately equal to said programmable time delay for providing said control signal according to a time interval programmable by said applet.

Claim 7. (New) The device of claim 1, wherein said system operates with Gigabit Ethernet.

Claim 8. (New) The device of claim 1, wherein said interface card translates data from one medium to another medium.

Claim 9. (New) The device of claim 1, wherein said interface cards are grouped into a chassis.

Claim 10. (New) The device of claim 9, further comprising a management card in said chassis, wherein said management card couples said interface cards to said local computer.

Claim 11. (New) The device of claim 1, wherein said multiplexer includes at least one Complex Programmable Logic Device (CPLD) for providing a switchable data path.

Claim 12. (New) The system of claim 6, wherein said network interface card further comprises a management logic and timer section, a link activity detector and a multiplexer.

Claim 13. (New) The system of claim 6, wherein said graphical user interface has a set of operator controls selected from at least one of the group consisting of: Switch On No Activity Received (SONAR), Mode, and Loss of Activity Switchover time.

Claim 14. (New) The system of claim 6, wherein said programmable time delay is selectable from about 1 to 32 seconds.